



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: :
Gerald Van Handel : Group Art Unit: 3782
U.S. Serial No. 10/797,949 : Examiner: Gary E. Elkins
Filed March 10, 2004 :
Docket No. 12244C1C1 :
For: BLANK FOR A DISPOSABLE :
THERMALLY INSULATED CONTAINER :

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

DECLARATION OF GERALD J. VAN HANDEL
UNDER 37 C.F.R. §1.131

Sir:

Gerald J. Van Handel, inventor of the subject matter of the above-noted patent application, makes the following statements in support of patentability of the application:

1. I was awarded a Doctor of Philosophy degree in materials science from Marquette University and have worked in connection with the design and manufacture of numerous disposable products over many years;
2. I understand from Counsel that the above-noted patent application has been rejected on the basis of prior art and that United States Patent No. 6,364,149 has been cited as prior art because it has a filing date of October 5, 1999 which is prior to the effective filing date of the above-noted patent application which, I understand, is July 20, 2001;

3. The above-noted patent application is directed to a container blank, including a shrink film layer adhered to a substrate adapted to shrink away from the substrate upon application of heat. Claim 1 of the application as filed is representative:
 1. A container blank comprising:
 - (a) at least one substrate layer made of disposable material; and
 - (b) at least one film layer disposed over said at least one substrate layer and having at least one portion adapted to shrink away from said at least one substrate layer upon application of heat, said shrunk film layer portion being adapted to thermally insulate the substrate layer located substantially behind said shrunk film layer portion.
4. I personally made and tested a container blank having the features recited in the above Claim 1 prior to October 5, 1999, wherein the film layer consisted of a single shrink film layer secured to paperboard by way of heat sealing;
5. Attached hereto, as page A1, is a redacted copy of a Laboratory Notebook page I prepared prior to October 5, 1999 describing in detail the concept of the container blank of the above-noted patent application;
6. Attached hereto, as page A2, is a redacted copy of another Laboratory Notebook page I also prepared prior to October 5, 1999 describing the preparation and testing of the container blank of the above-noted patent application;
7. It is seen from the notes on pages A1 and A2 that a paperboard/shrink film container blank as described in the above-noted patent application was actually made and tested prior to October 5, 1999;
8. I, the undersigned Declarant, declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by

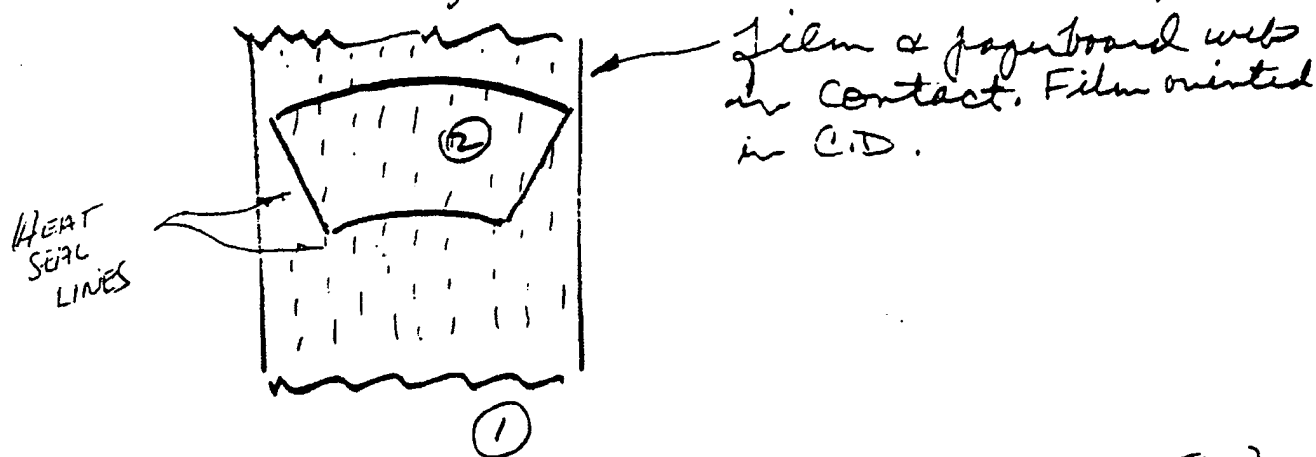
fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the subject application or any patent issuing thereon.

Signed this 10th day of March, 2008.

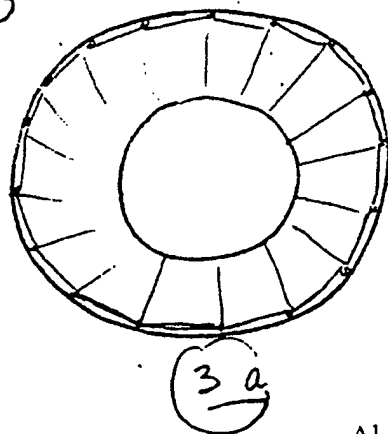

Gerald J. Van Handel

CUP IDEA

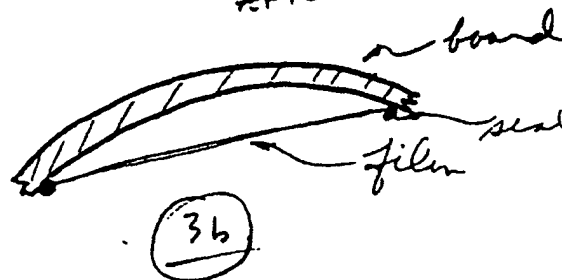
Combine paperboard and oriented plastic film (ex. Borty PE) to form a cup which will become more rigid and a better insulator w/ the addition of a hot liquid. Heat seal film to paperboard along discreet lines as in sketch. ① Form cup from blank. ② Hot liquid shrinks film as in ③ forming insulating spaces between paperboard & film. May get rigidity increase due to effectively thicker sidewall. Vents may be needed in paperboard to allow influx of air during shrinking process. Film acts as barrier to liquid.



TOP VIEW
OF
CUP



EXAGGERATED SECTION
OF LAMINATION
AFTER FILLING.



Re: RD 2507 pg. 62B

Materials: PE coated (2-side) board (cup stock)
Cryovac shrink film

Was able to demonstrate that concept on pg 62B/RD2507 is feasible. Impulse sealer used to heat seal film to cup blank. Heat setting 2.5-3.0 on sealer in lower Dine lat. Heat gun used to shrink film between seals after blank stapled into frusto conical configuration.

Observation: at lower heat setting seals not as strong resulting in adhesion at discrete points along heat seal line. Appears that a spot heat seal (rather than line seals shown on pg. 62B/RD2507) may be effective while reducing areas that aren't insulating after film is shrunk.

Sealing to non-PE coated cup stock requires heat setting of 15, but result appears same as with PE-coated cup stock.

WITNESSED AND

SIGNED

SIGNED

DATE

DATE

A2

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